

PERMIT CONDITIONS

Treffers Precision Inc
Permit Number 96-0103
January 16, 1997

The numerical section references in this Permit are based on Maricopa County Air Pollution Control Rules and Regulations (Rules) in effect on the date of issuance of these Permit Conditions. In the event that these rules are revised to change the numerical references during the term of this Permit, the revised numbering system will apply to this permit.

GENERAL CONDITIONS:

1. **Annual Compliance Certification:** The Permittee shall file an annual compliance certification with the Maricopa County Department of Environmental Services (Department), Attn: Air Quality Compliance Supervisor. The compliance certification shall be filed on a form and in the manner specified by the Maricopa County Air Pollution Control Officer (Control Officer).
2. **Certification:** Any document which is required to be submitted by this Permit or the Rules shall contain certification by a responsible official of truth, accuracy and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
3. **Controls:** Except as provided by the applicable Rules or these Permit Conditions, the Permittee shall not operate any equipment or process unless air pollution controls, required by either this Permit or the Rules, are in place, are operating without bypass, and are operating within their design parameters and in accordance with any other conditions specified in this Permit. This requirement to operate any required air pollution control equipment may be temporarily waived:
 - a. for good cause if advanced written approval is obtained from the Control Officer, or
 - b. for preventative maintenance of the control device if the shutdown is allowed in the control's Operation and Maintenance Plan which has been approved in writing by the Control Officer.

The Permittee shall notify the Control Officer, in accordance with Rule 220, before making any additions, modifications or replacements to any air pollution control equipment. This notification requirement does not apply to normal maintenance and repair activities.
4. **Fees:** The Permittee shall pay, in a timely manner, an annual fee for this Permit as determined by the Control Officer in accordance with Rule 280.
5. **Fugitive Dust:** The Permittee shall take all reasonable precautions to minimize the emissions of fugitive dust in accordance with §300 of Rule 310.

6. **Leased/Rented/Borrowed Equipment:** If the Permittee leases, rents, or lends any equipment covered by this permit to a second party, the Permittee shall provide the second party with a copy of this Permit. It is the responsibility of the person using the equipment to make sure that the equipment is properly permitted and operated. If the Permittee does not provide the second party with a copy of this Permit, both the Permittee and the second party shall be responsible for operating the source in compliance with the Permit and for any violation thereof.
7. **Maintenance:** The Permittee shall keep all equipment under this Permit in good working order through an active maintenance program established in accordance with the approved Operation and Maintenance Plans or, in its absence, with manufacturers' recommendations, and generally accepted industry standards.
8. **Malfunctions (Emergency Upsets):** A malfunction that causes emissions in excess of those allowable by either the Rules or these Permit Conditions shall constitute a violation. Any affirmative defense of a violation caused by a malfunction shall be documented in accordance with §501 of Rule 100.
9. **Material Containment:** Materials including, but not limited to, solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution.
10. **Modifications:** The Permittee shall notify the Control Officer, in accordance with the Rules, of changes, replacements or additions to the source which are not covered by this Permit.
11. **Odors:** The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.
12. **Operations:** The Permittee shall operate all equipment and processes in accordance with these Permit Conditions, applicable approved operations and maintenance plans, and all applicable requirements of Federal laws, Arizona laws, and Maricopa County Air Pollution Control Rules and Regulations.

The Permittee shall halt or reduce activities if necessary in order to maintain compliance with these Permit Conditions, all approved operations and maintenance plans, and all applicable requirements of Federal laws, Arizona laws, and Maricopa County Air Pollution Control Rules and Regulations.

13. **Portable Sources:** If this Permit is for a portable source, the Permittee shall notify this Department, Attn: Air Quality Compliance Supervisor, in writing at least ten days in advance of moving to any location in Maricopa County. The notification shall include, at a minimum, the information required by §410 of Rule 200.

If the proposed location will have additional sources of air pollution under the control of the Permittee, the notification shall also contain a summary of the projected and allowable emissions for these additional sources.

The ten day notification requirement may be waived if both of the following conditions are met:

- a. the Permittee can demonstrate to the satisfaction of the Control Officer that an emergency situation existed, and
- b. the Permittee notifies the Department of the required information by telephone as soon as is practical and follows up with a written copy within seven days.

The Permittee shall submit any fees required by Rule 280 at the time that the notification is filed.

If the Permittee obtains an air quality permit from the Arizona Department of Environmental Quality (ADEQ) for any source covered by this Permit, the Permittee shall provide a copy of the ADEQ permit to the Department within 30 days of its issue.

14. **Record Keeping:** The Permittee shall maintain accurate records as required by these Permit Conditions and by Section 500 of all applicable Rules. These records will be kept in a form which allows easy verification of compliance with these Permit Conditions and any applicable Rules.

All records shall be kept for a minimum of three years except that all records required to demonstrate that an air pollution control device is being operated properly shall be retained for five years.

All records required by this Permit shall be made available for inspection upon request by a representative of the Control Officer.

Upon request, the Permittee shall furnish to the Control Officer copies of records required to be kept by this permit.

15. **Renewal:** The Permittee shall file an application for a permit renewal at least six months, but not more than 18 months, before the expiration date of this Permit.
16. **Reopening For Cause:** This Permit shall be reopened or revised prior to expiration under any of the following conditions:
 - a. either the Control Officer or the Administrator of the United States Environmental Protection Agency (Administrator) determines that this Permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of this Permit, or

- b. either the Control Officer or Administrator determines that this Permit must be revised or revoked to assure compliance with the applicable requirements.

17. **Reporting:** If notified, the Permittee shall submit an annual emissions inventory report to the Control Officer. The report shall summarize the activities and air pollution emissions from the facility during the previous calendar year in accordance with §507 of Rule 100. The report shall be filed on a form supplied by the Control Officer and shall be due by April 30 or 90 days after the Control Officer makes the forms available, whichever is later.

The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising or revoking and reissuing this Permit or to determine compliance with this Permit.

Upon request, the Permittee shall furnish to the Control Officer copies of records required to be kept by this Permit.

The Permittee shall file any additional reports required by the Control Officer in a complete and timely manner.

18. **Right to Entry:** The authorized representative of the Control Officer, upon presentation of credentials, shall be permitted:
- a. to enter upon the premises where the source is located or emissions-related activity is conducted, or in which any records are required to be kept under the terms and conditions of this Permit, and
 - b. to have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this Permit, and
 - c. to inspect any source, at reasonable times, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required in this Permit, and
 - d. to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this Permit or other applicable requirements, and
 - e. to record any inspection by use of written, electronic, magnetic, and photographic media.

No claim of confidentiality for trade secrets or commercial information available to the Permittee under Arizona Revised Statutes (ARS) 49-487 or Rule 200 §400 can limit the scope of or otherwise interfere with an on-site inspection by a representative of the Control Officer.

19. **Rights and Privileges:** This Permit does not convey any property rights nor exclusive privileges of any sort.
20. **Severability:** The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

21. **Start-up Notification:** The Permittee shall give written notification to the Department, Attention Compliance Supervisor, at least 7 days but no more than 30 days before the initial start-up of any new equipment or process. Start-up shall be defined as the use of any equipment or process covered by this Permit in a manner that emits or controls a regulated air pollutant. However, startup shall not be considered as having occurred if the equipment or process is operated solely for the purpose of calibration or test runs.

This startup notification does not apply to processes or equipment recognized by the Control Officer as being trivial or insignificant activities.

22. **Temporary Equipment:** The Permittee shall notify the Control Officer and obtain appropriate approval, in accordance with the Rules, prior to the installation or operation of any temporary or contractor operated equipment not covered by this Permit.

SPECIFIC CONDITIONS:

23. **Allowable Emissions:** The Permittee shall not allow emissions into the atmosphere to exceed any of the following limits:

	Daily	Twelve Month Rolling Average
Total Volatile Organic Compounds (VOCs) including HAPs	90 pounds	15 tons
Total Hazardous Air Pollutants (HAPs)	60 pounds	9.9 tons
Single Hazardous Air Pollutant (HAP)	30 pounds	4.9 tons
Total Acid Fumes	9 Pounds	1.5 tons
Oxides Of Nitrogen (NO _x)	15 pounds	2.5 tons
Carbon Monoxide (CO)	5 pounds	0.8 tons
Particulates Smaller Than 10 Microns (PM10)	12 pounds	2 tons

The twelve month rolling average shall be calculated at the end of each calendar month by summing the total emissions over the most recent twelve calendar months.

Chromium Emission Standards:

24. a) For hard chromium electroplating the Permittee shall comply with the applicable standards as per 40 Code of Federal Regulations (CFR) 63.342 (c) on and after the compliance dates specified in 40 CFR 63.343(a).

The total chromium emissions from the exhaust gas stream discharged to the atmosphere, from hard chromium electroplating shall not exceed

- (i). 0.015 milligrams of total chromium per dry standard cubic meter (mg/dscm) of ventilation air. (6.6×10^{-6} grains per dry standard cubic foot (gr/dscf); or
- (ii). 0.03 mg/dscm (1.3×10^{-5} gr/dscf) if the hard chromium plating tank is an existing source and is located at a small, hard chromium electroplating facility.

Large, hard chromium electroplating facility means a facility that performs hard chromium electroplating and has a maximum cumulative potential rectifier capacity greater than or equal to 60 million ampere-hours per year.

- b) For chromium anodizing the Permittee shall comply with the applicable standards as per 40 CFR 63.342 (d) on and after the compliance date specified in 40 CFR 63.343 (a).

The total chromium emissions from the exhaust gas stream discharged into the atmosphere, from new and existing chromium anodizing tanks shall not exceed 0.01 mg/dscm (4.4×10^{-6} grains/dry standard cubic feet)

In accordance with 40 CFR 63.342 (d) (2), if a fume suppressant containing wetting agent is used as a control technique, compliance can be achieved by limiting surface tension in the tanks to 45 dynes/centimeter or less.

The chromium emission limitations are applicable only during tank operation and during periods of startup and shutdown.

The Permittee shall follow the guidelines as outlined in 40 CFR 63.344 (e) for multiple sources controlled by a common add-on air pollution control device.

25. **Reporting Requirements:**

- a) The Permittee shall submit Initial Notification reports for the hard chromium and anodizing processes in accordance with 40 CFR 63.347 (c).

The Initial Notification must address all the applicable items as outlined in 40 CFR 63.347 (c).

b) The Permittee shall submit a Notification of Compliance Status in accordance with 40 CFR 63.347 (e). The report shall contain all the elements of 40 CFR 63.347 (h).

26. Monitoring Requirements:

The Permittee shall conduct monitoring according to the type of air pollution control technique that is used to comply with the Chromium emission limitation. The Permittee shall follow the applicable monitoring requirements as per 40 CFR 63.343 (c).

All monitoring equipment shall be installed such that representative measurements of emissions or process parameters from the affected source are obtained. The information pertaining to the operational status of the monitoring equipment shall include execution of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

27. Recordkeeping Requirements:

The Permittee shall comply with the recordkeeping requirements as per 40 CFR 63.346. The Permittee shall maintain the following records.

- a) The Permittee's inspection records for the add-on air pollution control device, and monitoring equipment. The records should specify the device inspected, the date of inspection, a brief description of the working condition of the device during the inspection, any action taken to correct the deficiencies found during the inspection.
- b) Records of all maintenance performed, and malfunctions pertaining to the add-on air pollution control device, and monitoring equipment.
- c) Records of applicable monitoring data including the date and time the data are collected.
- d) Complete documentation in the event of excess emissions due to process malfunction, equipment malfunction or other due to other reasons.
- e) The total process operating time and actual cumulative rectifier capacity shall be properly documented.

- f) All documentation supporting the Notification and Ongoing Compliance reports.
- g) Test reports documenting results of all performance tests.
- h) Packed bed scrubbers for controlling chromium emissions shall be operated within ± 10 percent of the velocity pressure value established during the initial performance test, and within ± 1 inch of water column of the pressure drop value established during initial performance test. The Permittee shall record the above parameters once each day of scrubber operation.
- i) Composite mesh pad systems and Packed bed scrubber/Composite mesh pad systems for controlling chromium emissions shall be operated within ± 1 inch of water column of the pressure drop value established during the initial performance test. The Permittee shall record the pressure drop once each day of operation of subject control device. The Permittee shall follow the requirements as specified in 40 CFR, 63.343 (c) (4), for fiber-bed mist eliminators.
- j) All measurements as may be necessary to determine the conditions of performance tests. In the case of multiple sources controlled by a common add-on air pollution control device, the measurements necessary to determine compliance shall be properly documented.

All records shall be maintained for a period of 5 years from the date of each record.

28. Work Practice Standards

The Permittee shall comply with 40 CFR 63.342 (f) regarding work practice standards. The work practice standards as mentioned in 40 CFR 63.342, shall be incorporated for the scrubber and monitoring equipment.

29. Operation and Maintenance Plan (O&M Plan):

The Permittee shall submit an approvable O&M Plan for the vacuum evaporator in accordance with the Department guidelines, to the Department for review within 90 days of the issuance of the permit. The O&M Plan for the subject equipment shall establish appropriate ranges for the key operating parameters.

For each of the of the scrubbers controlling pollutants other than chromium, an O&M Plan shall be prepared and submitted to the Department within 60 days of the issuance of the permit. The Permittee shall establish and identify key operating parameters as per the manufacturers specifications including

but not limited to pressure drop, minimum flow, and pH in the O&M Plan. The scrubbers shall be maintained and operated as per the approved O&M Plan.

For each of the scrubbers controlling chromium emissions, an Operation and Maintenance Plan (O&M Plan) shall be prepared and submitted to the Department for associated air pollution control devices and monitoring equipment and include all the elements outlined in 40 CFR 63.342 (f) (3). The Operation and Maintenance Plan shall be implemented within 90 days after the issuance of the permit.

After the performance test as required for chromium emission control devices (packed bed scrubbers, composite mesh pad systems, fiber bed mist eliminators, and other approved control devices), the Permittee shall address site specific operating parameters (pressure drop across the system for composite mesh pad system and pressure drop, velocity pressure at the common inlet of control device for packed bed scrubber systems). The O&M Plan shall outline these established parameters and the applicable control devices shall be operated accordingly.

- a). In addition to a standardized check list to document the operation and maintenance of the applicable equipment and processes, the O&M Plan shall specify the operation and maintenance criteria for the chromium emission sources, the add-on air pollution control devices, and the process and control system monitoring equipment.
- b). The O&M Plan shall include procedures for identifying various malfunctions in process equipment, scrubbers, and the monitoring equipment. The plan shall also include preventive measures to avoid future malfunctions.
- c). If the O&M Plan fails to address or inadequately addresses a malfunction at the time the plan is initially developed, the Permittee shall revise the Plan within 45 days after the malfunction. A copy of the revised O&M Plan shall be submitted to the Control Officer.
- d). The Permittee shall follow the Recordkeeping and Reporting requirements of the O&M Plan in accordance with 40 CFR 63.346 (b) 40CFR 63.342 (f) (3) (iv), and 40CFR 63.347 (h), respectively.
- e). The O&M Plan for the scrubbers shall include the minimum flow values for scrubber water. The scrubber operating parameters shall be clearly visible and easily readable. The Permittee shall perform appropriate maintenance in this regard.
- g). The Permittee shall test the chromium concentration in each of the chromium controlling scrubbers waters at least weekly to ensure the

concentrations as mentioned in the O&M Plan. The test results shall be available to the Department upon inspection.

- h). The pH of the each scrubber water shall be maintained in the range of 6 to 9 and shall be documented at least once every day for each of the scrubbers.

30. **Performance testing and test Methods**

- a). The Permittee shall conduct a performance test for the following equipment as specified in (b) and (c). The performance test shall be conducted within 60 days after the issuance of the permit and after the applicable equipment has achieved the capability to operate at its maximum production rate on a sustained basis. This time frame may be extended with the Department's prior approval, but in no case exceeding 180 days.

The Permittee shall use the test methods as identified in 40 CFR 63.7 of subpart A and 40 CFR 63.344 (c) to demonstrate compliance with the standards in 40 CFR 63.342.

The Permittee shall submit a protocol for the testing to the Department for review and approval at least 30 days prior to commencement of testing.

The Permittee shall notify the Department in writing of the exact date and time of testing at least ten (10) days prior to commencement of testing to allow Department representatives to witness the test.

A test report including all test results shall be submitted to the Department for review and compliance determination within thirty (30) days of the test completion.

- b). The Permittee shall test the following equipment
 - i). **Scrubbers:** The Permittee shall test each of scrubbers S10, S11, S12, S15 to comply with the chromium emissions standards as outlined in permit condition 24 (a) for the hard chromium electroplating.
 - ii). The Permittee shall test scrubber S08 to comply with the chromium emission standards as outlined in permit condition 24 (b) for chromium anodizing.
 - iii). The Permittee shall test scrubber S13 for emissions of Hydrochloric acid and nickel compounds. The test results from scrubber S13 for hydrochloric acid and nickel compounds emission rates shall be used to estimate the air quality impact

by conducting a Screen Computer Dispersion Modeling study. The emission rates of hydrochloric acid and nickel compounds shall meet the Arizona Ambient Air Quality Guidelines for 1-hour, 24-hour and annual concentrations.

- iv). The Permittee shall test scrubber S20 for following pollutants
Cadmium compounds.
Manganese compounds.
Hydrochloric acid.
The Permittee shall use the test results to demonstrate meeting the Arizona Ambient Air Quality Guidelines for 1-hour, 24-hour and annual concentrations. The Permittee shall use EPA SCREEN model to estimate the air quality impacts of the above mentioned pollutants.

In addition to the performance test for the scrubbers as required, the Permittee shall test the chromium concentration in each of the scrubber outlet waters not to exceed 3.4 oz/gal or as specified in the O&M Plan to optimize the performance. The Permittee shall perform the testing once every month.

31. **Screen Modeling**

Stack exits: The Permittee shall estimate the emissions from each of the stacks S01, S02, S03 for the following pollutants.

Chromium compounds
Cadmium compounds
Lead compounds
Methylene Chloride
Tetrachloroethylene
Methyl Ethyl Ketone
Methyl Isobutyl Ketone
Toluene

The Permittee shall demonstrate meeting the standards for Arizona Ambient Air Quality guidelines for 1-hour, 24-hour and annual concentrations. The Permittee shall use a EPA SCREEN model to estimate the air quality impacts of the above mentioned pollutants.

The Permittee shall follow the guidelines as mentioned in Sub part T, 40 CFR part 63 (National Emission Standards for Halogenated Solvent Cleaning) for exhaust stack exit S07(Vapor Degreaser) for tetrachloroethylene emissions. The emission estimates shall be used to demonstrate meeting the thresholds for Arizona Ambient Air Quality Guidelines for 1-hour, 24-hour and annual concentrations at fence line.

For multiple sources that emit the same pollutant from several exhaust stacks that are within about 100 meters of each other, shall be analyzed by treating all of the emissions as coming from a single stack. This analysis procedure is outlined in Section 2.2 merged parameters for multiple Stacks EPA-454/R-92-019 titled "Screening Procedures for Estimating the Air Quality Impact of the Stationary Sources".

32. **Miscellaneous**

- a). All the cleaning materials and acids used in the plating operations shall be carefully handled to avoid VOCs and/or acid fumes being emitted in to the atmosphere. The containers shall be always closed when not in use.
- b). All the used cleaning materials shall be disposed in a manner such that VOCs and/or acid fumes are not emitted into the atmosphere.
- c). All plating, etching, cleaning, and stripping tanks shall be covered when not in use.
- d). The usage records of all the materials that produce regulated air pollutants shall be maintained for minimum of five years from the date of usage.
- e). Records of disposal/recovery of all regulated materials shall be kept.
- f). Emissions from the electro polishing, passivation/bright dip operations shall be vented to a properly functioning scrubber which is maintained within the parameters specified in the O&M Plan. Emissions from plating operations other than chromium anodizing operations shall be vented to a properly functioning scrubber which is maintained within the parameters specified in the O&M Plan.
- g). The usage records of materials which produce emissions such as nickel, lead, cadmium and copper shall be accurately documented.

Permit Conditions for Surface Coating Operations

33. **Controls:**

- a). The Permittee shall conduct all spray coating activities in a paint booth equipped with exhaust filters which are certified by the manufacturer and accepted by the Control Officer as having a minimum over spray removal efficiency of at least 92% for similar types of applications. The Permittee shall

install and maintain the exhaust filters in accordance with the manufacturer's recommendations, with no gaps or visible openings.

- b). All spray coating operations shall be conducted utilizing a spray gun with a transfer efficiency of at least 65% as certified by the manufacturer and accepted by the Control Officer. Other methods of application may be used if they result in at least a 65% transfer efficiency.
- c). The exhaust from all paint booths shall be directed vertically up into the atmosphere.

34. **Material Limitations:** Permittee shall not apply any surface coating, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contains VOCs in excess of the limits in Table I of Rule 336 §301.

Low usage coatings do not need to meet the requirements of Rule 336, §301 and §302 if the aggregate of all formulations do not exceed 55 gallons per year facility-wide. A low usage coating is defined as a coating with a separate formulation that is used in volumes of less than 20 gallons per year.

The small sources which emit less than 15 pounds per day and less than two tons per year of volatile organic compounds from all surface coating operations plus all VOC used for thinning and coating equipment cleanup do not need to meet the requirements of Rule 336 sections 301 and 302.

35. **Record Keeping:**

- a). The Permittee shall maintain a current list of VOC containing materials used for surface coating operations at the facility, stating the VOC content of each in either pounds per gallon or grams per liter.
- b). The Permittee shall keep accurate usage and disposal records in a complete and consistent manner of the type, quantity and VOC content of all VOC containing materials used for surface coating operations at the facility. These records shall be kept in a form that will allow the emission limitations of these Permit Conditions to be easily verified.

For the purposes of determining the frequency of record keeping requirements, average daily VOC emissions shall be defined as the total amount of VOCs emitted from surface coating operations at the facility during any calendar month divided by the total number of days that surface coating operations were performed during that month.

If the average daily VOC emissions from surface coating operations never exceeds 15 pounds per day,

- i). The Permittee may update usage and emissions records on a monthly basis.
- ii). The Permittee must keep a record of the days on which surface coating operations are performed.

If the average daily VOC emissions from surface coating operations ever exceeds 15 pounds per day, the Permittee shall keep daily usage records of all VOC containing material. However, records of VOC containing cleanup materials used for surface preparation, cleanup, or the removal of materials may be updated weekly.

- c). The Permittee shall keep a log demonstrating that all training requirements of these Permit Conditions are being met.

36. **Training:** The Permittee shall fully train all individuals before they are allowed to operate any surface coating equipment. Training shall include, at a minimum, proper application techniques, cleaning procedures, and equipment setup and adjustment as well as record keeping, VOC containment and VOC disposal requirements. Refresher training shall be given at least annually.

37. **Other:**

- a). **Spray Equipment Cleanup:** The Permittee shall not use materials containing VOCs in the cleanup of the spray equipment used in surface coating operations unless:
 - i). the equipment is disassembled and cleaned in a solvent vat which is closed when not in use or,
 - ii). The used cleaning compounds are collected in a container which is closed when not in use and the solvent is disposed of in a manner which does not allow it to evaporate into the atmosphere or,
 - iii). Cleaning is done by other methods which have been approved in writing by the Control Officer.
- b). **VOC Containment and Disposal:** The Permittee shall take all reasonable measures to keep VOCs from evaporating into the atmosphere including, but not limited to:
 - i). All materials from which VOCs can evaporate, including coatings, fresh solvent, used solvent, waste solvent and solvent soaked rags and residues shall be stored in closed containers when not in use. Such containers one gallon and larger shall be legibly labeled with their contents. VOC containing materials shall be disposed of in closed containers.
 - ii). All containers and mixing tanks containing VOCs shall be leak free and shall be kept covered except when the materials are being transferred or when the containers are being cleaned.

Permit Conditions for Abarasive Blasting

The Permittee shall not allow emissions from any abrasive blasting activity to exceed 20 % opacity for an aggregate of more than three minutes during any one hour period. The opacity shall be measured in accordance with Section 500 of Rule 312.

38. **Control Parameters:** The Permittee shall utilize at least one of the following control measures for all abrasive blasting:
- a). Confined blasting.
 - b). Wet abrasive blasting.
 - c). Hydroblasting.
 - d). A control measure that has been predetermined by the Department to be equally effective in controlling particulate emissions.
39. **Record Keeping:** The Permittee shall keep records of the following:
- a). The dates when abrasive blasting activities are conducted, the type of abrasive material used, the type of control measure used, and the engine run time hours if a diesel or gasoline compressor larger than 50 horsepower is used.
 - b). The Permittee shall keep monthly records of the type and amount of abrasive blasting media used.

40. **Permit Conditions for Cold Degreaser without Remote Reservoir**

The Permittee shall comply with one of the following requirements of permit condition 40 (a).

(a). Control Requirements

i). Install a tightly fitting cover that shall be closed at all times except during parts entry and removal. A water layer at a minimum thickness of 2.5 centimeters (1 inch) on the surface of the solvent shall be used to meet the free board requirement if the solvent is insoluble in and denser than water.

ii). Install a tightly fitting cover that shall be closed at all times except during parts entry and removal and a freeboard ratio of 0.75 or greater.

(b). Work and Operational Practice requirements (40 CFR 63.642):

If the Permittee complies with permit condition 40 (a) (ii) then the Permittee shall comply with the following work and operational practice requirements.

(i). All waste solvent shall be collected and stored in closed containers. The closed container may contain a device that allows pressure relief, but not allow the liquid solvent to drain from the container.

(ii). If a flexible hose or flushing device is used, flushing shall be performed only within the freeboard area of the solvent cleaning machine.

- (iii). The owner or operator shall drain solvent cleaned parts for 15 seconds or until dripping has stopped, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while draining.
- (iv). The owner or operator shall ensure that the solvent level does not exceed the fill line.
- (v). The spills during the solvent transfer shall be wiped up immediately. The wipe rags shall be stored in covered containers meeting the requirements of (b)(i)
- (vi). When air or pump agitated solvent bath is used, the permittee shall ensure that the agitator is operated to produce a rolling motion of the solvent but not observable splashing against tank walls or parts being cleaned.
- (vii). The Permittee shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute as measured between 1 and 2 meters upwind and at the same elevation as the tank lip.
- (viii). Sponges, fabric, wood, and paper products shall not be cleaned in the cold degreaser.

(c). Reporting Requirements

The Permittee shall submit an initial notification report as described in 40 CFR 63.468 (a) and a compliance report as described in 63.468(b).

(d). Miscellaneous

Solvent cleaning equipment not subjected to NESHAP shall comply with any other additional requirements as applicable for the cold degreaser based on Rule 331 and Rule 330 of Maricopa County Air Pollution Control Regulations.

41. **Permit Conditions for Vapor Degreaser**

a). Design Requirements:

The permittee shall follow the following design requirements.

- i). An idling and downtime mode cover, as described in 40 CFR 63.343(d)(1)(i), that may be readily opened or

closed, that completely cover the cleaning machine openings when in place, and is free of cracks, holes and other defects or

A reduced room draft as described in 40 CFR 63.343(e)(2)(ii).

- ii). Each cleaning machine shall have a free board ratio of 0.75 or greater
- iii). Each cleaning machine shall have an automated parts handling system capable of moving parts or parts baskets at a speed of 3.4 meters per minute or less from the initial loading of parts through removal of cleaned parts.
- iv). Each vapor cleaning machine shall be equipped with a device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.
- v). Each vapor cleaning machine shall have a primary condenser.
- vi). Each vapor cleaning machine shall be equipped with a vapor level control device that shuts off sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.
- viii). The Permittee shall follow the requirements of 40 CFR 63.463 (a) (7) if the machine is designed to use a lip exhaust.

b). Requirements based on Solvent/Air Interface Area

The Permittee shall follow the following requirements based on the solvent/Air interface area.

- i). The Permittee shall follow 40 CFR 63.463(b)(1)(i) if the solvent/air interface area of the solvent cleaning machine is 1.21 square meters or less.
- ii). The Permittee shall follow 40 CFR 63.463(b)(2) (i) if the solvent/air interface area of the solvent cleaning machine is 1.21 square meters or more.

As an alternative to 43 (b) (i) and , 43 (b) (ii) of the permits conditions the permittee may comply with the idling emission limit of 0.22 kilograms per hour per square meter (0.045 pounds per hour per square

foot) of solvent/air interface area as determined using the procedures in 40 CFR 63.465 (a).

c). Work and Operational Standards

The Permittee shall follow the work and operational standards as specified in 40 CFR 63.463 (d) and as applicable.

d). Monitoring

The Permittee shall conduct the applicable monitoring and recordkeeping requirements on a monthly basis for the control devices.

i). If the freeboard refrigeration device is used as a control device the Permittee shall ensure that the chilled air blanket temperature measured at the center of the air blanket is no greater than 30 percent of the solvent boiling point. The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the air blanket during the idling mode.

ii). If a superheated vapor system is used as a control device the Permittee shall follow the requirements as specified in 40 CFR 63.463 (e) (2) (vi). The Permittee shall use a thermometer or thermocouple to measure the temperature at the center of the superheated solvent vapor zone while the solvent cleaning machine is in the idling mode.

iii). If a reduced room draft is used to comply with standards then the permittee shall ensure that the flow or movement of air across the top of the freeboard area of the solvent cleaning machine or within the solvent cleaning machine enclosure does not exceed 15.2 meters per minute at any time and maintain the operating conditions under which the wind speed was demonstrated to be 15.2 meters per minute or less. The air flow or wind speed shall be measured using the procedures as outlined in 40 CFR 63.466 (d).

The Permittee shall also follow the monitoring and recordkeeping requirements as mentioned in 40 CFR 63.466 (d).

iv). If a dwell time is used to comply with the standards then the permittee shall determine the appropriate dwell time for each type of part or parts basket, or determine the maximum dwell time using the most complex part type or parts basket. The Permittee shall ensure that, after cleaning, each part is held in the solvent cleaning machine freeboard area above the vapor zone for the dwell time determined for that particular part or parts basket, or

for the maximum dwell time determined using the most complex part type or parts basket as described in 40 CFR 63.464 (d).

v). If a idling mode cover is used to comply with the standards then the Permittee shall ensure that the cover is in place whenever parts are not in the solvent cleaning machine and completely covers the cleaning machine openings when in place.

In case of working mode cover the Permittee shall ensure that the cover opens only for part entrance and removal and completely covers the cleaning machine openings when closed.

The Permittee shall ensure that the cover in both working mode and idling mode is maintained free of cracks, holes and other defects. The Permittee shall conduct visual inspection to determine if the cover is opening and closing properly.

vi). In case of usage of carbon adsorber as a control device, the Permittee shall measure and record the concentration of halogenated HAP solvent in the exhaust of the carbon adsorber weekly with a calorimetric detector tube. This test shall be conducted while the solvent cleaning machine is in the working mode and is venting to carbon adsorber. The exhaust concentration shall be determined using the procedure as outlined in 40 CFR 63.466 (e) (1) through (e) (3).

In addition to the above mentioned requirements the permittee shall record all the exceedances, as applicable. If the exceedances are not corrected within 15 days of detection adjustments or repairs shall be made to the solvent cleaning system or control device to reestablish required levels. The parameter must be measured immediately upon adjustment or repair and shall be demonstrated to be within required limits.

The Permittee shall report all exceedances and all corrections and adjustments made to avoid an exceedance as specified in 40 CFR 63.468(h).

e). Performance Testing

The Permittee shall conduct an initial performance test to determine idling emission rate of the solvent cleaning machine , if idling emission limitation is used as an option to comply with the requirements of 40 CFR 63.463. The Permittee shall follow all the applicable requirements of 40 CFR 63.463 (f). The Permittee shall use test methods as outlined in 40 CFR 63.465 and follow

other testing requirements as outlined in section 30 of the permit conditions.

f). Recordkeeping and Reporting

The Permittee shall follow all the applicable recordkeeping and reporting requirements as outlined in 40 CFR 63.467 and 40 CFR 63.468.

(g). Miscellaneous

Solvent cleaning equipment not subjected to the NESHAP shall also comply with any other additional requirements as applicable for the vapor degreaser as per Rule 331 and Rule 330 of Maricopa County Air Pollution Control Regulations.

42. **Operational Limitations for Fuel Burning Equipment:** The Permittee may only use natural gas, butane and propane as fuels for boilers and heaters.